### **Daily Project Activities**

Sunday, August 2, 2009

Weather Conditions: 94°F, 86% humidity

#### Field Activities

EPA staff (Jeanne Schulze, Rick Ehrhart, Rob Luschek, and Tara Hubner) arrived at the EPA office and packed the van. Staff went to EPA warehouse and packed the Excursion SUV. Staff commuted to Broken Bow, OK.

#### Huffman

• Upon arrival, staff attempted to enter Huffman site, but the facility was locked. Sunday evening, the OPLC consultant demolished the chemical storage shed at Huffman.



#### **OPLC**

• Staff continued on to OPLC and marked off grid corners with wooden stakes, pin flags, and spray paint for grid soil sampling. Staff departed OPLC to check-in to Beaver's Bend State Park cabins.

Huffman/OPLC Week 1 Trip Report





Huffman/OPLC Week 1 Trip Report





Monday, August 3, 2009

Weather Conditions: 95°F, 73% humidity

#### Field Activities

#### Huffman

EPA staff arrived at Huffman for project kick-off meeting and health and safety meeting. EPA staff marked off Huffman hot spot excavation areas with pin flags and spray paint. Decontamination area and soil storage area were installed at Huffman by OPLC consultant. Clean Harbors delivered two (2) 25 cu. vd. rolloff boxes to Huffman for the soil to be incinerated. Excavation began on the Huffman chemical storage shed area. Excavated soil from the chemical storage shed area was placed in one of the Clean Harbors roll-off boxes. Hot spots at Trench 3 and HGS-5-1 were excavated and the soil was placed on the soil storage area. Excavation began near the Huffman kiln hot spot. Free product was encountered during the excavation. Excavated soil from the kiln area was placed in the other Clean Harbors roll-off box. The City of Broken Bow ("the City") delivered a 20 cu, vd. roll-off box. The roll-off box was filled with pieces of the chemical storage shed. The City picked up the roll-off box and disposed of the chemical storage shed pieces at the City of Broken Bow Municipal Solid Waste Landfill. The City returned the roll-off box to Huffman. EPA staff marked off proposed Huffman surface impoundment fence location. Due to significant vegetation (large trees) around approximately 3/4 of the surface impoundment area, the length of fencing to be installed will be reduced. Fencing is only necessary around the areas not covered by natural barrier.







## OPLC

• USACE contractors collected 8 offsite samples adjacent to OPLC.

# Lab Activities

• PCP immunoassay training all day



Tuesday, August 4, 2009

Weather Conditions: 96°F, 65% humidity

#### Field Activities

#### Huffman

• EPA staff arrived at Huffman for health and safety meeting. EPA staff and USACE contractors collected confirmation soil samples from the Huffman Trench 3 and HGS-5-1 excavation pits. Excavation in the Huffman chemical storage shed area was completed. Confirmation samples were collected from the chemical storage shed area. Due to lack of EPA funding for additional soil disposal by incineration, excavation in the Huffman kiln area was assumed completed. Confirmation soil samples were collected from the kiln area for lab analysis but not for PCP immunoassay analysis. The rest of the Huffman chemical storage shed was placed in the City roll-off box and disposed of at the City landfill.



#### **OPLC**

• OPLC consultant dug down 9 feet below ground surface with a backhoe into the northeast corner OPLC surface impoundment. Soil below the impoundment cap was found to be contaminated by what appeared to be creosote. The excavation pit was allowed to remain open until ODEQ project manager would arrive on Wednesday. Groundwater seeped into excavation pit and a sheen was visible on the surface of the water. The contaminated soil was sampled by ODEQ and OPLC consultant. The OPLC consultant shipped the sample to a lab for analysis. Excavation began on the OPLC QC pad slope.

Huffman/OPLC Week 1 Trip Report







## Lab Activities

• PCP immunoassay training/certification all day



Wednesday, August 5, 2009 Weather Conditions: 92°F, 76% humidity

#### Field Activities

The ODEQ project manager arrived in Broken Bow and was updated on Huffman and OPLC project status.

#### Huffman

• EPA staff arrived at Huffman for health and safety meeting. Huffman excavation confirmation samples were delivered to EPA field lab for PCP immunoassay analysis. Results for immunoassay analysis were received in the afternoon. The PCP immunoassay results for the Huffman excavation confirmation samples confirmed that sufficient material had been removed from the chemical storage shed, Trench 3, and HGS-5-1 excavation pits. ODEQ project manager decided that additional soil needed to be removed from the kiln area and that the ODEQ would pay for an additional roll-off box for soil to be incinerated.

#### **OPLC**

• EPA staff and USACE contractor began the OPLC grid sampling. Based on previous sampling conducted by ODEQ and OPLC, the eastern OPLC surface impoundment was considered clean. The eastern OPLC surface impoundment cap was graded and sloped to match surrounding topography.





## Lab Activities

• Performed PCP immunoassay analysis of Huffman excavation confirmation samples.



Thursday, August 6, 2009

Weather Conditions: 93°F, 78% humidity

#### Field Activities

#### Huffman

• EPA staff arrived at Huffman for health and safety meeting. A 20 cu. yd. roll-off box for the kiln area soil was delivered to Huffman. In order to excavate additional soil from the kiln area, the City of Broken Bow moved the Clean Harbors roll-off boxes out of the way. Excavation continued at the kiln area. The kiln area soil was placed in the ODEQ roll-off box to be disposed of by incineration. OPLC consultant began backfilling Huffman excavation pits with clean soil taken from OPLC. The end-dump had mechanical issues that slowed down the back-filling operation. The USACE fencing contractors installed the fence posts for the surface impoundment fence and the skimmer system. A total of approximately 600 feet of fencing will be installed.



#### **OPLC**

• EPA staff and USACE contractor continued the OPLC grid sampling. The excavation of the OPLC QC pad and slope was completed. EPA staff and USACE contractor broke off from the grid sampling to collect confirmation soil samples of the QC pad and slope. The samples were delivered to the EPA field lab for PCP immunoassay analysis. EPA staff and USACE contractor resumed the grid sampling. Results for the QC pad and slope confirmation soil samples indicated that additional soil needed to be excavated from the QC pad and slope. EPA staff and the OPLC consultant scoped out the proposed monitor well locations so that brush could be cleared prior to installation.





## **Lab Activities**

 Performed PCP immunoassay analysis of OPLC QC pad and slope excavation confirmation samples and grid samples.

Friday, August 7, 2009

Weather Conditions: 95°F, 79% humidity

EPA staff checked-out of lodging at Beaver's Bend State Park Friday morning (Beaver's Bend does not provide government rate over weekend).

#### Field Activities

#### Huffman

• EPA staff arrived at Huffman for health and safety meeting. Backfilling of the excavation pits at Huffman was completed.

#### **OPLC**

OPLC consultant dug test pits approximately 24 inches into QC pad and slope. EPA staff and USACE contractor collected soil samples from bottom of the pits for PCP immunoassay analysis only. During the test pit sampling, the OPLC consultant backhoe operator backed the backhoe into the USACE contractor's truck. Insurance information was exchanged between the OPLC consultant and the USACE contractor. The soil samples were delivered to the EPA field lab for PCP immunoassay analysis. During the test pit digging, additional soil was removed from one of the test pits which appeared to indicate significantly deeper soil contamination than originally expected by the OPLC consultant. ODEQ, as the site lead, intends to close the QC pad and slope in place with groundwater monitoring. EPA staff consulted with the ODEQ project manager and decided to adjust the locations of two (2) of the proposed monitor wells to assist with compliance groundwater monitoring of the QC pad and slope. The budget included three (3) monitor wells at 70 feet deep. If the installed monitor wells are shallower than estimated, the ODEQ requested that the remaining footage be utilized to install test borings in the QC pad to delineate the vertical extent of contamination. The PCP immunoassay analysis results of the test pit samples revealed that the QC pad and slope soil is contaminated with PCP 24 inches below the surface. EPA staff and USACE contractor completed the OPLC grid sampling and collected two (2) offsite soil samples northeast of OPLC. With ODEQ present, the OPLC consultant backfilled the hole that was dug through the cap of the northeast surface impoundment with the soil that had been removed.

Huffman/OPLC Week 1 Trip Report







## **Lab Activities**

• Performed PCP immunoassay analysis on Huffman kiln area confirmation samples and OPLC test pit samples.

ODEQ and OPLC consultants demobilized early on Friday. Upon completion of the OPLC offsite sampling, EPA staff returned to Huffman to find that the soil waste piles and roll-off boxes had not been covered and used poly sheeting and empty boxes were scattered around the site. EPA staff covered the two (2) Clean Harbors roll-off boxes with the provided covers. EPA staff gathered equipment and departed site to check-in to weekend lodging at Hochatown Lodge.

Saturday, August 8, 2009

Weather Conditions: 95°F, 71% humidity

EPA staff met with USACE contractor to discuss the past week's activities and upcoming plans and the current project costs. One of the USACE contractor field technicians was demobilized due to the completion of excavation and surface soil sampling.

#### Field Activities

#### Huffman

 Due to threat of rain, EPA staff covered the multiple soil waste piles with polysheeting. To prevent the polysheeting from blowing off the piles, EPA staff shoveled dirt and rocks and moved wooden fence posts onto edges of polysheeting. EPA staff covered the uncovered ODEQ roll-off with poly sheeting and placed rocks on top and duck taped around the dumpster to keep the polysheeting from blowing off.





## Lab Activities

• EPA staff finished field lab dismantlement and cleaned up the facility that was used.

## Sunday, August 9, 2009 Weather Conditions:

EPA staff checked out of Hochatown Lodge Sunday morning. EPA staff set up an outdoor work station to prepare this Week 1 Trip Report prior to checking in to lodging at Beaver's Bend State Park.



### **Budget Status**

### **Huffman Surface Impoundment Fence**

Budgeted 1,500 feet of fence at \$21,488

Estimated 600 feet of fence to be installed on Monday

### Soil Sampling

Budgeted two (2) sampling technicians for 14 days at \$21,137 and 167 samples to analytical lab for SVOC and metals analysis

One sampling technician was demobilized due to completion of excavation confirmation and surface soil sampling. Currently, 50-60 samples have been collected to be sent to analytical lab for SVOC and metals analysis. Additional soil boring samples will be collected on Monday, Tuesday, and, possibly, Wednesday.

#### Monitor Well Installation

Budgeted three (3) monitor wells up to 70 feet deep.

The three (3) wells will be installed on Monday and Tuesday. If the wells are shallower than estimated, the remaining footage will be utilized to install test borings through the QC pad. Based on a request by ODEQ, soil samples may be collected from the test borings every two (2) feet for laboratory analysis of SVOCs and metals.

#### Soil for Incineration

Budgeted 90 tons at \$77,527

Estimated 50 cu. yd. (approx. 70 tons)